DATA ITEM DESCRIPTION

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Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data deeded, and comparing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0180), Washington, DC 20503.

1. TITLE 2. IDENTIFICATION NUMBE

TEST/INSPECTION REPORT

DI-NDTI-80809B

3. DESCRIPTION/PURPOSE

3.1 The test/inspection report is used to document test/inspection results, findings, and analyses that will enable the government or contracting agency to evaluate compliance with system requirements, performance objectives, specifications, and test/inspection plans.

4. APPROVAL DATE (YYMMDD) 5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) 6a. DTIC APPLICABLE 6b. GIDEP APPLICABLE (YYMMDD) F/AFMC-DOP

7. APPLICATION/INTERRELATIONSHIP

- 7.1 This data item description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.
- 7.2 This DID is applicable to engineering (developmental), preliminary qualification, qualification, and acceptance testing.
- 7.3 This DID supersedes DI-NDTI-80809A and DI-MISC-80653.

8. APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

F7231

10. PREPARATION INSTRUCTIONS

- $10.1~{
 m Format}$. Contractor format is acceptable. Organize the information required by paragraph 10.2 and its subparagraphs in a manner that facilitates presentation and understanding
- $10.2 \ \underline{\text{Content}}$. The test/inspection report shall contain the following information, as applicable.
- 10.2.1 <u>Cover and title page</u>. The following information shall appear on the outside front cover and title page:
 - a. Report date.
 - b. Report number (contractor or government)
 - c. Contractor's name, address, and commercial and government entity code.
 - d. Contract number and contract line item number or sequence number (if applicable).
 - e. Type of test/inspection (for example, first article acceptance test, quality conformance inspection, developmental test, qualification test, environmental test).
 - f. Identification of item tested/inspected.
 - g. Date or period of test/inspection.
 - h. Name and address of requiring government activity.
 - i. Security classification, downgrading and declassifying information, if applicable.

(Continued on page 2)

11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.

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- Block 10, Preparation Instructions (continued)
- 10.2.2 <u>Table of contents</u>. The table of contents shall identify the following:
- a. The title and starting page of each major section, paragraph, and appendix of the report.
- b. The page, identifying number, and title of each illustration (for example; figure, table, photograph, chart, and drawing).
- 10.2.3 <u>Introduction</u>. The introduction shall include the following information:
- 10.2.3.1 Test/inspection objective(s). The specific test/inspection objective(\overline{s}) as specified in the contract tasking document.
- 10.2.3.2 Item(s) tested/inspected. Complete identification of the item(s) tested/inspected including the following:
 - a. Nomenclature.
 - b. National stock number.
 - c. Model number, part number, and serial number
- d. Type of item (for example, prototype, production item, laboratory model).
 - e. Serial or lot number.
 - f. Applicable engineering changes.
 - g. Production item specification, if applicable.
 - h. Date of manufacture.
- 10.2.3.3 <u>Test/inspection requirements</u>. Complete identification of the test/inspection requirements correlated to contractual requirements including the following:
 - a. Required test/inspection parameters.
- b. Performance requirements, acceptance or compliance limits, and environmental criteria.
- $10.2.4 \ \underline{\text{Summary}}$. Complete test/inspection report summary including the following:
- a. A brief discussion of the significant test/inspection results, observations, conclusions, and recommendations covered in greater detail elsewhere in the report.
- $\ensuremath{\text{b.}}$ Proposed corrective actions and schedules for failures or problems encountered.
- c. Identification of deviations, departures, or limitations encountered, referenced to the contract requirements.
- $\mbox{\it d.}$ Tables, graphs, illustrations, or charts as appropriate to simplify the summary data.
- 10.2.5 <u>Reference documents</u>. Complete identification of all documents referenced in the test/inspection report including the following, as applicable:
 - a. Prior test/inspection reports on the same item.
 - b. Test/inspection plans and procedure documents.
 - c. Prior certifications of compliance.
- d. Contractor's file designation where test/inspection records are maintained.
 - e. Input parameters used.

The applicable issue of the documents cited therein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be 10.2.6 Body of report. The body of the test/inspection report shall be as follows:

- 10.2.6.1 Test equipment identification. Complete identification of each item of test equipment used in the test/inspection including the following:
 - a. Nomenclature.
 - b. Model number.
 - c. Serial number.
 - d. Manufacturer.
 - e. Calibration status.
 - f. Accuracy data.
 - g. Comments, if applicable.
- 10.2.6.2 Test/inspection facility installation and set-up. Complete description of the physical set-up used in conducting the test/inspection to include the following:
 - a. Location or orientation of the item.
- b. Location, orientation, or settings of test equipment and instrumentation.
 - c. Location, orientation, or settings of sensors and probes.
 - d. Location or orientation of interconnections, cables, and hoop-ups.
 - e. Electrical power, pneumatic, fluidic, and hydraulic requirements.

Drawings, illustrations, and photographs may be used for clarification.

- 10.2.6.3 Test/inspection procedures. Complete description of the procedures used in conducting the test/inspection to include the following:
- a. Item selection and inspection that verified suitability for test/ inspection.
- b. Summarized sequence of testing/inspection steps, including a description of how the item was operated during the test/inspection, and any control conditions imposed.
- 10.2.6.4 Test/inspection results and analysis. A copy of all test/inspection results and analysis to include the following:
- 10.2.6.4.1 Recorded data. The actual recorded data (for example, log book entries, oscillographs, instrument readings, plotter graphs). If the recorded data is extensive, provide it in an appendix.
- 10.2.6.4.2 Test/inspection results. Identification of all test/inspection results to include the following:
- a. Matrices comparing results achieved against test/inspection objectives or requirements.
- b. A discussion of these matrices as to their significance, and how they compare to any prior test/inspections.
- c. Calculation examples.d. Discussion of anomalies, deviations, discrepancies, or failures, including their impact, causes, and proposed corrective actions. The discussion shall address discrepancies between design requirements and the tested/inspected configuration.

- 10.2.6.5 $\underline{\text{Conclusions}}$. Test/inspection conclusions distinguished between objective $\underline{\text{and subjective}}$ to include the following:
- a. The effectiveness of the test/inspection procedures in measuring item performance.

- b. The success or failure of the item to meet required test/inspection objectives.
 - c. The need for repeat, additional, or alternative tests/inspections.
 - d. The need for item redesign or further development.
- e. The need for improved test/inspection procedures, techniques, or facilities.
 - f. The adequacy and completeness of the test/inspection requirements.
- 10.2.6.6 <u>Recommendations</u>. Recommendations appropriate to the test/inspection results and conclusions including the following:
 - a. Acceptability of the item tested/inspected (pass or fail).
 - b. Additional testing/inspection required.
 - c. Redesign required.
 - d. Problem resolution.
 - e. Test/inspection procedure or facility improvements.
 - f. Disposition of items tested/inspected.
 - g. Documentation changes required.
 - h. Testing/inspection improvements.
- 10.2.7 <u>Authentication</u>. The following certifications shall be included, as applicable:
- 10.2.7.1 <u>Authentication of test/inspection results</u>. A statement that the test/inspection was performed in accordance with applicable test/inspection plans and procedures, and that the results are true and accurate. The authentication shall include the signature of the contractor personnel that performed the test(s)/inspection(s), a contractor representative authorized to make such certification, and any government witnesses.
- 10.2.7.2 <u>Authentication of prior validation</u>. A statement identifying those requirements not tested/inspected or measured that were previously validated. Include identification of the data and method employed for such validation (for example, prior test/inspection, analytical verification, equivalent item, and so on). The authentication shall include the signature of a contractor representative authorized to make such authentication and any government witness.
- 10.2.7.3 <u>Authentication of acceptability</u>. A statement that the item tested/inspected either passed or failed item acceptability requirements. This authentication shall include the signature of a contractor representative authorized to make such authentication and any government witness.
- 10.2.8 Appendices. Appendices shall be used to append detailed test/inspection data, drawings, photographs, or other documentation too voluminous to include in the main body of the report. This includes referenced documentation not previously provided by the government, and test/inspection reports from any associated test/inspection activity that may have performed some of the testing/inspecting requirements.

End of DI-80809